

HIP/VALLEY CONVERSION			
IF COMMON RAFTER ROOF PITCH IS...		THEN HIP/VALLEY RAFTER ROOF PITCH BECOMES...	
RISE/RUN	SLOPE	RISE/RUN	SLOPE
1/2	3"	1/12	3"
3/12	10"	3/12	10"
5/12	14"	5/12	14"
7/12	18"	7/12	18"
9/12	23"	9/12	23"
11/12	27"	11/12	27"
13/12	34"	13/12	34"
15/12	40"	15/12	40"
17/12	44"	17/12	44"
19/12	49"	19/12	49"

CONVERSION CHART FOR SIMPLE ROOFS ONLY. CHART DOES NOT APPLY FOR DUAL PITCH ROOFS.

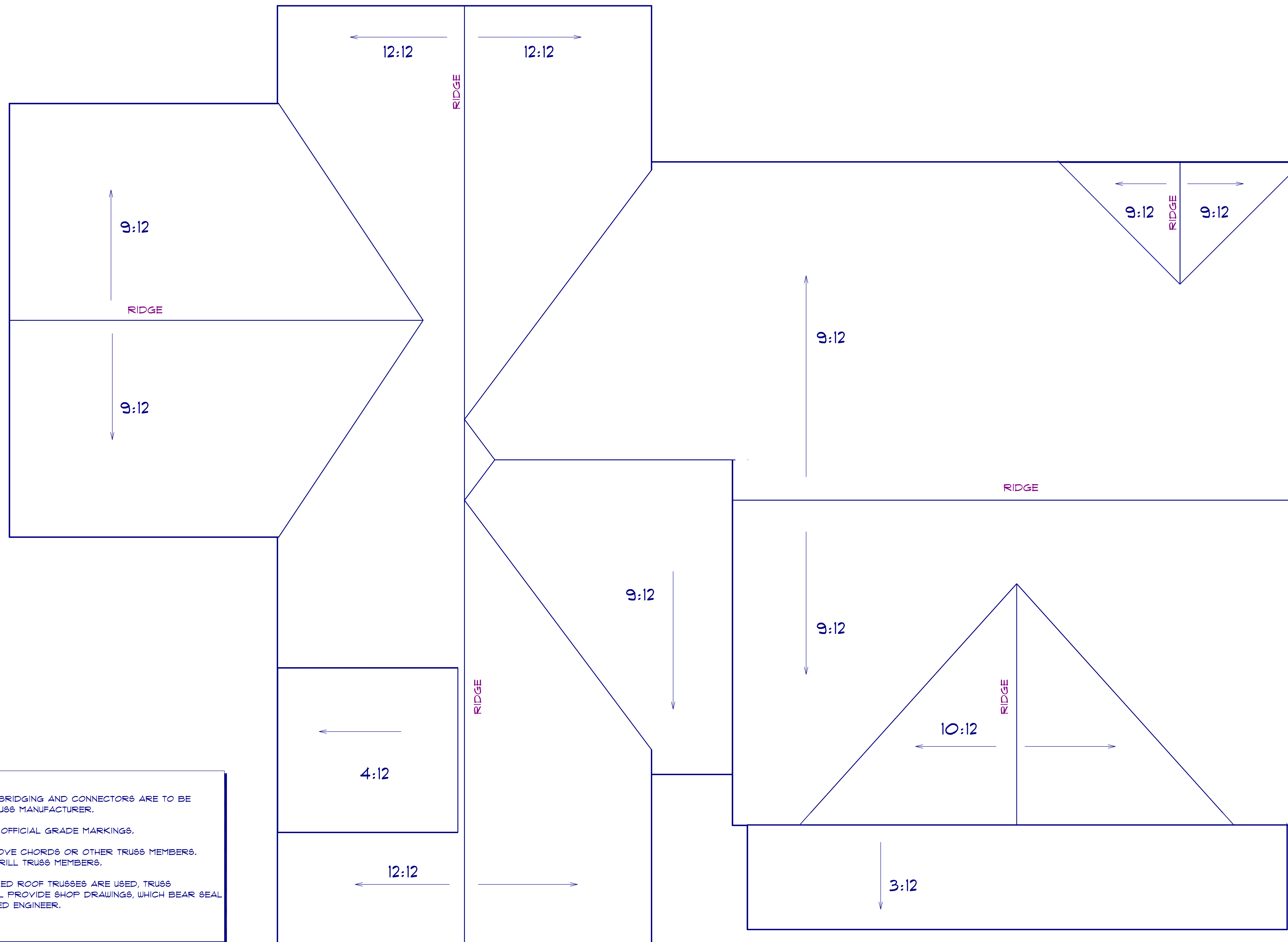
MAXIMUM HEADER SPANS		
HEADER SPANS FOR EXTERIOR BEARING WALLS SOUTHERN PINE #2 OR BETTER LIVE LOAD=30psf DEAD LOAD=10psf		
ALL SPANS ARE ASSUMING A MAXIMUM OF 24 FEET OF SUPPORTED ROOF FRAMING.		
SUPPORTING ROOF AND CEILING ONLY		
SIZE NUMBER OF FLIES IN ()	MAXIMUM SPAN (FEET AND INCHES)	JACK STUDS
(2) 2 x 6	4-7	1
(2) 2 x 8	5-9	1
(2) 2 x 10	6-10	2
(2) 2 x 12	8-1	2
(3) 2 x 8	7-5	1
(3) 2 x 10	8-7	2
(3) 2 x 12	10-1	2

SUPPORTING ROOF, CEILING AND ONE CENTER BEARING FLOOR		
SIZE NUMBER OF FLIES IN ()	MAXIMUM SPAN (FEET AND INCHES)	JACK STUDS
(2) 2 x 10	5-8	2
(2) 2 x 12	6-9	2
(3) 2 x 10	7-2	2
(3) 2 x 12	8-5	2

NOTES:
 1. THE ABOVE INFORMATION IS FROM THE 2018 IRC TABLE R602.1(1).
 2. PLEASE REFER TO THE IRC 2018 FOR ADDITIONAL LUMBER SPECIES AND HEADER OPTIONS.
 3. ALL HEADER SIZES SHALL BE DESIGNED/VERIFIED BY A LOCAL PROFESSIONAL.

RAFTER SPANS		
RAFTER SPANS FOR SOUTHERN PINE SPECIES (LIVE LOAD = 20 PSF, LA = 240) DEAD LOAD = 10 PSF		
SIZE	SPACING (INCHES)	SPANS (MAXIMUM RAFTER SPANS BETWEEN BRACINGS) (FT.-IN)
2"x6"	12.0	12-11
	16.0	11-2
	19.2	10-2
2"x8"	24.0	9-2
	12.0	16-4
	16.0	14-2
2"x10"	19.2	12-11
	24.0	11-1
	12.0	19-5
2"x12"	16.0	16-10
	19.2	15-4
	24.0	13-5
2"x10"	12.0	22-10
	16.0	19-10
	19.2	18-1
2"x12"	24.0	16-2

NOTE: THE ABOVE TABLE IS BASED ON THE IRC 2018 TABLE R602.4.1 (3)



ROOF NOTES:
 TRUSSES, BRACINGS, BRIDGING AND CONNECTORS ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER.
 IDENTIFY LUMBER BY OFFICIAL GRADE MARKINGS.
 DO NOT CUT OR REMOVE CHORDS OR OTHER TRUSS MEMBERS. DO NOT NOTCH OR DRILL TRUSS MEMBERS.
 WHERE PRE-ENGINEERED ROOF TRUSSES ARE USED, TRUSS MANUFACTURER SHALL PROVIDE SHOP DRAWINGS, WHICH BEAR SEAL OF A N. C. REGISTERED ENGINEER.

ROOF PLAN
 SCALE: 1" = 1/4" 12" OVER HANG ALL

NOTE TO BUILDER:
 IF STICK BUILT ROOF AND CEILING SYSTEM ARE USED PLEASE REFER TO ATTACHED DETAIL SHEETS

1.1 This plan has been drawn to comply with the 2018 NC Building Code

1.2 Minimum Design Loads for Building and Other Structures ASCE 7-16

2 Roof Dead Load 15 PSF

3 Roof Live Load 20 PSF

4 Typical Floor Dead Load 10 PSF

5 Floor Live Loads

5.1 Rooms other than sleeping rooms 40 PSF

5.2 Sleeping Rooms 30 PSF

5.3 Stairs 40 PSF

5.4 Decks 40 PSF

5.5 Exterior Balconies 60 PSF

6 Wind Loads

6.1 Ultimate Design Wind Speeds 15 MPH

6.2 Wind Importance Factor, I_w LOO

6.3 Exposure B

6.4 Walls (Component and Cladding) 25 PSF

6.5 Roofs (Component and Cladding)

6.5.1 Roof Slopes 2.25/12 to 1/12 34.8 PSF

6.5.2 Roof Slopes 1/12 to 12/12 21 PSF

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DRD

SCALE: 1" = 3/16"
 DRAWN BY:
 DATE: 1/3/2023

HARRINGTON PROPERTIES OF NC LLC
 2659 SAN LEE DRIVE
 SANFORD NC 27330

MIDDLETON PLACE
 LEFT GARAGE

ROOF LAYOUT